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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,855	07/03/2003	Leland A. Samson	SAM-0703	4406

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EXAMINER

GRAHAM, GARY K

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/612,855	<b>Applicant(s)</b> SAMSON, LELAND A.	
	<b>Examiner</b> Gary K. Graham	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09082003</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### Claim Rejections – 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, it appears improper to define the frame structure as comprising a wiper arm when claim 1 sets forth that the frame structure is “for connection to the wiper arm of a vehicle”. Claim 1 sets forth that the wiper arm is not part of the frame structure. To claim such now appears confusing.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6, 10, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Piccione et al (US patent 6,236,019).

- The patent to Piccione discloses the invention, a heated windshield wiper assembly, as is claimed. Piccione discloses a frame structure (11,19) connected to the wiper arm (13,14) of a vehicle via an adapter (shown but not numbered). The frame structure has an elongated blade support member (20) thereon for receiving a T-shaped top portion of blade member (12) therein. The blade member has a circular bore there-through which receives a heating element (21), comprised of a Nichrome wire or bar. An electrical connection structure (15,16,16',17) couples the heating element to the vehicle power source. The connection structure includes a thermostat (15) for activating the heating element. The thermostat is coupled to the wiper arm and operates at a predetermined temperature between 32-40 degrees F. A strap is also shown securing the connection structure to the wiper arm (fig.1).

Claims 1, 2, 10, 11, 12, 14, 15, 17, 19, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Friesen (US patent 6,507,973).

The patent to Friesen discloses the invention, a heated windshield wiper assembly, as is claimed. Friesen discloses a frame structure (fig.1) for pivotal connection to the wiper arm (14) of a vehicle via an "adapter" such a pin as shown. The frame structure has an elongated blade support member (22) thereon for receiving a T-shaped top portion (26) of blade member (24) therein. The blade member has a circular bore (36) there-through which receives a heating element (40), comprised of wire (46) within a plastic sheath (42). An electrical connection structure (76,78,80,82) couples the heating element to the vehicle power source. The connection structure includes a thermostat (82) for activating the heating element and a fuse (70) for protecting the assembly. The

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thermostat is coupled via a strap to the frame structure and operates at a predetermined temperature around the freezing point of water. A strap is also shown securing the connection structure to the wiper arm.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 8, 9, 13, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friesen (US patent 6,507,973).

The patent to Friesen discloses all of the above recited subject matter with the exception of the thermostat being attached to the wiper arm, the thermostat being of a bimetal and having an activation temperature between 34-43 degrees F, the assembly including a ring connector, butt connector and tap connector, the fuse being a 5 amp fuse, the heating wire being nickel chromium and heating the blade between 100-350 degrees F, the sheath being PTFE and the blade members being of a particular length.

While Friesen discloses the thermostat as on the frame structure, to move such to the wiper arm would be entirely obvious. Merely shifting the location of parts, lacking some criticality, appears as an obvious variation. It would have been obvious to one of skill in the art to shift the location of

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the thermostat from the frame structure to the wiper arm, as an obvious shift in the location of part of Friesen, to space the thermostat farther from the debris on the windshield.

While Friesen discloses a thermostat, he does not specify the construction thereof.

However, making thermostats of bimetal is extremely well known. It would have been obvious to one of skill in the art to make the thermostat of Friesen of bimetal, as is well known if it isn't already, to provide a readily available thermostat. Further, the particular thermostat employed appears as a choice of the manufacturer based more on availability and price than on any inventive concept. Likewise, while Friesen discloses that the thermostat operates at approximately 32 degrees F, to modify such appears an obvious variation of Friesen. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. The particular activation temperature appears to relate more to the particular environment and materials used than on any inventive concept. It would have been obvious to one of skill in the art to adjust the activation temperature of Friesen as needed, including as claimed, to optimize the operation thereof.

While Friesen does not disclose all of the particular connectors claimed to couple the heating element to the vehicle power supply, such appears an obvious variation of Friesen. One of skill in the art would find it obvious to employ any connectors needed, including as claimed, to couple the heating assembly of Friesen with the power supply, lacking any criticality of such connectors. Mere selection of different connectors does not appear inventive or anything more than that which one of skill in the art would find obvious for the purpose of coupling the heating assembly to the vehicle power supply.

While Friesen discloses a fuse, he does not specify the amperage. However, the selection of the amperage does not appear inventive. One of skill in the art would by routine experimentation select the optimum amperage of the fuse based on the wiring, heating element, etc. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. It would have been obvious to one of skill in the art to select the optimum amperage

While Friesen does not disclose the particular heating element material or the particular sheath material as claimed, such does not impart patentability to the claims. Mere selection of known materials to make the heating element and the sheath, the selection being on the basis of suitability for the intended use, would be entirely obvious.

Likewise, the particular temperature range and length of the blades do not impart patentability to the claims. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. It would have been obvious to one of skill in the art to select the optimum temperature range and the optimum blade length.

Claims 17, 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piccione et al (US patent 6,236,019) in view of Selders (US patent 5,787,543).

The patent to Piccione discloses all of the above recited subject matter with the exception of a PTFE sheath on the heating wire, the blade body made of silicone and the thermostat being a bimetal thermostat.

The patent to Selders discloses a heated wiper assembly wherein the heating wire (20) passing through a circular aperture in the blade (7) is protected by a sheath of silicone.

It would have been obvious to one of skill in the art to surround the heating wire of Piccione with a protective sheath, as clearly suggested by Selders, to prevent damage to the wire.

With respect to claims 20 and 21, while the blade of Piccione is suggested as being of rubber-like material such as neoprene and the sheath suggested by Selders is of silicone, it appears an obvious variation to select different materials. It appears the mere selection of known materials to make the blade and the sheath, the selection being on the basis of suitability for the intended use, would be entirely obvious.

With respect to claim 22, while Piccione discloses a thermostat, he does not specify the construction thereof. However, making thermostats of bimetal is extremely well known. It would have been obvious to one of skill in the art to make the thermostat of Piccione of bimetal, as is well known, to provide a readily available thermostat. Further, the particular thermostat employed appears as a choice of the manufacturer based more on availability and price than on any inventive concept.

Claims 3, 4, 5, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Friesen (US patent 6,507,973) in view of Holland (US patent 5,826,293).

The patent to Friesen discloses all of the above recited subject matter with the exception of a leg member or rib projecting within the tubular bore for engaging and securing the heating element.

The patent to Holland discloses placing a heating element (70, figs.2,4) within a passageway (40) through wiper blade (20). The heating element is comprised of conductive wires (72,74) with a sheath (75) there-around. The passageway is essentially oval with rib members (not numbered but shown) projecting therein to engage and secure the heating element.



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It would have been obvious to one of skill in the art to shape the tubular bore of Friesen such that it has a leg or rib therein to engage the heating element, as suggested by Holland, to prevent unwanted movement of the heating element within the bore.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K. Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GKG  
20 April 2006

Gary K Graham  
Primary Examiner  
Art Unit 1744

